

RECENTLY PATENTED INVENTIONS.

Agricultural Implements.

GRAIN-WEIGHER.—ANTON GOEHRING, Edgeley, N. Dak. The patent describes a weighing device adapted to receive grain from a threshing-machine, elevator, or storage bin. The device is operated entirely and automatically by the weight of the grain. A double bucket is provided in the construction, one section of the bucket being in position for filling, while the other section is discharging its contents. The grain-receiving bucket is supported on a scale-beam, and is held in position to receive the grain. When a proper amount of grain has been delivered, the bucket is released from the scale-beam. The gate at the outlet of the chute arranged to supply grain to the bucket is also operated from the scale-beam.

MOWER OR REAPER.—PATRICK H. LOVE, Fort Worth, Tex. The invention is an improvement in mowers which are provided with endless, flexible cutter-bars. The finger-bar has a fixed portion and an outer portion which is hinged to the other so as to be raised or folded in a vertical plane. An endless, travelling cutter-bar is arranged within the finger-bar and is provided with transverse joints which, when brought into alignment with the joint of the finger-bar, enable the cutter-bar to be folded with the latter.

Vehicle Accessories.

ELASTIC TIRE.—WILLIAM F. WILLIAMS, 17 and 18 Great Pulteney Street, Golden Square, London, England. Mr. Williams has combined with a hollow tire, an internal soldered elastic core of such different cross-section or shape compared with that of the space within which it is contained, that while affording a direct internal support to the tread of the tire, vacant spaces will be left at the side of the core, so that the core will have perfect freedom for expansion laterally when under compression by the load without liability of extension in the longitudinal direction.

Special Apparatus and Tools.

HERNIAL TRUSS.—GEORGE V. HOUSE, Mt. Vernon, N. Y. A novel front piece is provided which serves to keep the truss more steadily in position and provide more stable pressure to the pad than would be the case if the pad were attached directly to the web-band or a material having no stiffening.

PLANE.—THOMAS M. SEEDS, JR., and MARTIN FRINGS, Philadelphia, Pa. This plane is particularly adapted for smoothing floors. The invention comprises certain peculiar features of construction, by which the plane is carried on a wheeled-frame and is pushed over the floor by means of a long handle, thus enabling the operator to maintain an erect position during his work.

LEG-FASTENER.—PATRICK H. DUNN, Rome, N. Y. Mr. Dunn has invented a device for fastening legs to a bath-tub or the like, the device being of such construction that the legs can be rigidly attached or readily removed whenever necessary.

BREAD-CUTTER.—EDMOND N. CORRIVEAU, Stonington, Conn. The invention provides a knife-guide adjustable to different thicknesses of blades, which knife-guide will hold the blade straight across the board. The device can be readily set or arranged by cutting uniform slices of any desired thickness.

VACUUM-PAN.—ROBERT J. BOWMAN, Alexandria, La.—It is the ordinary practice to remove the vapor rising from the boiling liquid saccharine matter by means of an air-pump and a spray-condenser connected with the pan by a large pipe. The present invention provides a means for condensing and removing the vapor by the application of a freezing or cold-producing medium within the pan instead of by an air-pump and a spray-condenser. The medium is cold water or that received from an ordinary ice-producing machine.

APPARATUS FOR TRANSFORMING STEAM.—JACQUES O'BRIEN, 20 Rue des Pyramides, Paris, France. By the use of this apparatus it is possible to convert steam by economically imparting to it any required degree of temperature without increasing the density, and by causing the steam to circulate without too great a friction within a series of metal tubes whose surface operates upon the steam submitted to an exceedingly great division. The tubes constituting such apparatus are heated either by the waste hot gases escaping from the steam-generating furnace on their way to the chimney or by any convenient special furnace so as to distribute the heat as uniformly as possible.

Gas Apparatus.

METER.—JOHN S. WARDE, West New Brighton, Richmond, New York city. Mr. Warde has invented a meter with a valve at its inlet, so that if the meter be reversed on the service-pipe by the consumer, it will be prevented from operating its gearing and dial hands backward. A back draft from any cause, such as a break in the main, cannot reverse the dial mechanism.

INCANDESCENT BURNER.—JAMES J. BYRNES, Brooklyn, New York city. This single or multiple burner can be used with a mantle and is so constructed that the air is supplied in such manner as to cause the flame to engage with the mantle on all sides at its inner portion. Hence great brilliancy of illumination and economic consumption of gas is attained.

Furnace Improvements.

SMOKE-CONSUMER.—WILLIAM A. MARTEL, Brandon, Manitoba, Canada. The invention relates to improvements in devices designed to be attached to the stove or heater for consuming products of combustion—such as smoke, soot, and gases—arising from a coal or wood fire; and the object is to provide a device for this purpose that can be readily attached to a stovepipe and by means of which sparks can be arrested and the products of combustion burned and the heat therefrom utilized, thus resulting in an economy of fuel.

FIRE-POT.—JOHN W. GHEEN, Portland, Oregon. The subject of this invention is a fire-pot for heating soldering-irons or the like. The construction of the improved device is such that a number of irons can be held in vertical position over the fire-pot.

Miscellaneous Inventions.

BRIDGE-GATE.—JAMES CUMMINGS, 642 West Lake Street, Chicago, Ill. This improved automatically-operating bridge-gate is arranged to be projected across the roadway when the bridge is opened and to be readjusted clear of the roadway when the bridge is closed. The gate requires no watchman or other attendant. When the bridge is closed the gate is lowered to the level of the roadway, and the instant the bridge is opened the gate is elevated.

COIN-CARRIER.—ELLWOOD W. ROBERTS, Brooklyn, New York city. Mr. Roberts has invented a very simple and efficient envelop for the reception of a coin, which envelop is so designed that the coin-pocket is formed without any gumming. The coin-carrier consists of a main body portion, which can be used as a memorandum sheet for indicating the sender's intentions. At one end of its body a triangular-shaped money-flap is formed. Merely by folding this flap properly the coin is held securely.

RECEPTACLE FOR TRANSPORTING BOTTLES, ETC.—DAVID RICHARDS, Dynevor Tin Plate Works, Pantyffynon, South Wales, England. The bottle is provided with a horizontal partition or diaphragm apertured to receive the shoulders of bottles and separate the body portions. The body of the container is also recessed so that in conjunction with the diaphragm it will prevent the bottles' falling about. The case is made of sheet-metal; and the invention consists essentially in the mode of construction whereby the apertured partition or diaphragm is made integral with the sides of the main or upper part of the case.

COMBINED SINK AND WASHTUB.—WALTER J. MINNS, Brooklyn, New York city. The purpose of this invention is to provide a means whereby a sink can be combined with a wash-tub and each can be separately used to as much advantage as if they were entirely independent. The connections are so made that they are readily kept clean, and so that the usual sink strainer and its putted joint are dispensed with. No water can possibly splash up and run down at the top of the sink.

DUST-EXCLUDER.—JOHN P. MARTIN, Ely, Nev. The device is to be used by persons in a dusty atmosphere to prevent the dust entering the throat and lungs during the process of inhalation. To this end the device consists of a box which can be placed in communication with the mouth or nostrils and which is provided with devices for permitting the passage of air and at the same time excluding dust.

PIPE.—JOHN F. KENNEFICK, Cripple Creek, Colo. The purpose of the invention is to provide a means for keeping the pipe clean and rendering the smoke cool before it reaches the mouth of the smoker. The pipe has a main bowl and a supplemental bowl removably secured therein. The adjacent walls of the main and supplemental bowls are spaced apart to form an air chamber. A perforated flange extends between the upper edges of the main and supplemental bowls.

FLOOR OR SIDEWALK.—RICHARD FLEMING, Corning, Ohio. The floor or sidewalk is formed of sections or blocks of artificial stone not liable to crack or scale and arranged in such a manner that a worn-out or broken section can be readily removed and renewed without disturbing the remaining sections. A workman will not be required in the construction of a section of the floor to prepare a large amount of cement, but merely a sufficient quantity for a single block at a time. The material is readily smoothed down while it sets to give each section a smooth, ground-like appearance.

DEMIJOHN-FRAME.—ALLAN L. WOOD, Brooklyn, N. Y. The invention provides a folding frame particularly adapted as a pivotal support for demi-johns and the like and their casings, which frame is exceedingly steadfast when placed in position for use and light and durable in construction. A simple and effective means is provided for limiting the outward movement of the members of the frame. The pivot pins of the frame serve as fulcrums for the articles to be supported.

Designs.

PARCEL-CARRIER.—WILLIAM CARRY, Newport, R. I. The carrier consists of a single piece of wire bent to form two hooks for engaging the twine of the parcel and a central loop for the finger.

NOTE.—Copies of any of these patents will be furnished by Munn & Co. for ten cents each. Please state the name of the patentee, title of the invention, and date of this paper.

Business and Personal Wants.

READ THIS COLUMN CAREFULLY.—You will find inquiries for certain classes of articles numbered in consecutive order. If you manufacture these goods write us at once and we will send you the name and address of the party desiring the information. In every case it is necessary to give the number of the inquiry. MUNN & CO.

Marine Iron Works. Chicago. Catalogue free.

Inquiry No. 1411.—For manufacturers of an electrical apparatus for filtering water.

For hoisting engines. J. S. Mundy, Newark, N. J.

Inquiry No. 1412.—For castings for kerosene engines to run an automobile.

TURBINES.—Lefel & Co. Springfield, Ohio, U. S. A.

Inquiry No. 1413.—For dealers in the Herans electrical pyrometer.

"U. S." Metal Polish. Indianapolis. Samples free.

Inquiry No. 1414.—For manufacturers of aluminum articles, such as spoons, etc.

WATER WHEELS. Alcott & Co., Mt. Holly, N. J.

Inquiry No. 1415.—For dealers in sheet iron stampings for field and armature for small alternating power and fan motors.

Yankee Notions. Waterbury Button Co., Waterbury, Ct.

Inquiry No. 1416.—For an engine and dynamo to supply electric lights for a town. Outfit to be either second-hand or new.

Gasoline Lamps and Systems. Turner Brass Works, Chicago.

Inquiry No. 1417.—For pencil holders to hold a round soapstone pencil. Also for soapstone pencil manufacturers.

"Perfect aluminum solder. Amer. Hdw. Mfg. Co. Ottawa, Ill."

Inquiry No. 1418.—For manufacturers of machines for making rope and cord.

Handle & Spoke Mch. Ober Mfg. Co., 10 Bell St., Chagrin Falls, O.

Inquiry No. 1419.—For manufacturers of roofing slag.

Machine chain of all kinds. A. H. Bliss & Co. North Attleboro, Mass.

Inquiry No. 1420.—For dealers in butcher knife and razor handles.

Sawmill machinery and outfits manufactured by the Lane Mfg. Co., Box 13, Montpelier, Vt.

Inquiry No. 1421.—For manufacturers of small, portable machines for reboring engine cylinders.

For Sheet Brass Stamping and Small Castings, write Badger Brass Mfg. Co., Kenosha, Wis.

Inquiry No. 1422.—For manufacturers of electric welding machines.

Rigs that Run. Hydrocarbon system. Write St. Louis Motor Carriage Co., St. Louis, Mo.

Inquiry No. 1423.—For dealers in a pressure pump for forcing grout into cracks on stone or concrete walls. It is similar to a bicycle pump, but larger and can be loaded from the top.

Ten days' trial given on Daus' Tip Top Duplicator. Felix Daus Duplicator Co., 5 Hanover St., N. Y. city.

Inquiry No. 1424.—For two hydraulic rams, pipe and fixtures for supplying water from a spring.

SAWMILLS.—With variable friction feed. Send for Catalogue B. Geo. S. Comstock, Mechanicsburg, Pa.

Inquiry No. 1425.—For manufacturers to make a model wind and water pump from blue-prints.

Inventions developed and perfected. Designing and machine work. Garvin Machine Co., 149 Varick, cor. Spring Sts., N. Y.

Inquiry No. 1426.—For manufacturers of excelsior machines.

Designers and builders of automatic and special machines of all kinds. Inventions perfected. The W. A. Wilson Machine Company, Rochester, N. Y.

Inquiry No. 1427.—For manufacturers of novelties for the mail order business.

The celebrated "Hornsby-Akroyd" Patent Safety Oil Engine is built by the De La Vergne Refrigerating Machine Company. Foot of East 138th Street, New York.

Inquiry No. 1428.—For dealers in new or second-hand Italian harps.

The best book for electricians and beginners in electricity is "Experimental Science," by Geo. M. Hopkins. By mail, \$4. Munn & Co., publishers, 361 Broadway, N. Y.

Inquiry No. 1429.—For manufacturers of rubber novelties, as toy balloons, etc.

Send for new and complete catalogue of Scientific and other Books for sale by Munn & Co., 361 Broadway, New York. Free on application.

Inquiry No. 1430.—For dealers in typewriter repairers' tools.

Inquiry No. 1431.—For manufacturers of souvenir buttons.

Inquiry No. 1432.—For manufacturers of water motors.

Inquiry No. 1433.—For a filter paper to purify grape juice; in sheets of not less than 20 inches.

Inquiry No. 1434.—For a hand machine for grinding almonds; and for other confectioners' machinery.

Inquiry No. 1435.—For American pictorial post cards.

Inquiry No. 1436.—For manufacturers of an apparatus for testing cables of houses after being wired; it should be a small rotary magnet, and should be able to work up to 100 megohms.

Inquiry No. 1437.—For a pantograph "routing" machine for engraving purposes.

NEW BOOKS, ETC.

SOME NOTES ON CHEMICAL JURISPRUDENCE. A Digest of Patent-Law Cases, Involving Chemistry. By Harwood Huntington. Published by Harwood Huntington, 1 West 54th Street. Price 25 cents.

THE ART OF CANNING AND PRESERVING AS AN INDUSTRY. By Dr. Jean Pacrette. Jersey City, N. J.: J. H. Bommergue, Publisher. 1901. 8vo. Pp. 203. Price \$10.

In all technical literature there is no subject where the literature is so inadequate as on canning. It is almost impossible to obtain any formulas which are of the slightest value, so that any treatise on the subject may be warmly welcomed. The book before us has a large number of formulas for making preserves of all kinds. It also gives directions for the canning of vegetables, meats, preparations of mustards, canning of fish, oysters, soups, etc.

Notes & Queries

HINTS TO CORRESPONDENTS.

Names and Address must accompany all letters or no attention will be paid thereto. This is for our information and not for publication. References to former articles or answers should give date of paper and page or number of question. Inquiries not answered in reasonable time should be repeated; correspondents will bear in mind that some answers require not a little research, and, though we endeavor to reply to all either by letter or in this department, each must take his turn. Buyers wishing to purchase any article not advertised in our columns will be furnished with addresses of houses manufacturing or carrying the same. Special Written Information on matters of personal rather than general interest cannot be expected without remuneration. Scientific American Supplements referred to may be had at the office. Price 10 cents each. Books referred to promptly supplied on receipt of price. Minerals sent for examination should be distinctly marked or labeled.

(8373) R. D. McC.: 1. Is a large number of coils on the armature better to run a dynamo than a small number? A. Yes. 2. What is the voltage of an Edison dynamo? A. The old Edison dynamo as used for incandescent lighting upon the three-wire system was wound for about 110 volts.

(8374) T. D. H. writes: Among the queries noted in No. 7, SCIENTIFIC AMERICAN, current volume, No. 8318, W. J. B. Supposing a hole to be bored through the earth and the effect produced upon a ball being dropped into it. I beg leave to differ from the philosophy given in the answer. The ball will fall with an increasing velocity until it has passed the center of gravitation, and only so far past that point as the force of inertia will carry it, but not as far as it has fallen to reach it. It will then return, but with a decreased velocity owing to the shorter distance it has to drop again toward the center. It will not return to the point from which it was first dropped, and thus it will continue to shorten its vibration until it will stop at that point known as the center of gravity. Its motion will be exactly like that of the pendulum of a clock when the spring or weight is broken; it will continue to swing with a gradual loss of energy until it comes to a standstill. A. We regret that we are not able to coincide with these views regarding the ball falling into a hole bored through the earth in which by some means there is no resistance whatever to its motion. Its motion is like that of a pendulum from whose path all resistance is removed. We infer that such a pendulum would swing forever under the law known as Newton's First Law. A body at rest will remain at rest, and a body in motion will continue forever in motion unless stopped by some external force. Inertia is not a force. It expresses simply the inability of matter to start or stop itself, and if there is no external cause of loss of energy that motion must continue forever.

(8375) B. W. S. asks: Will you please inform me why it is necessary to bond the rail joints of an electrical railroad, when said rails are joined by fish plates upon both sides? A. The joints at the fish plates are not close enough for electrical connections, and are oxidized so that the resistance is entirely too great. Even if the joint were made good enough the rust would soon spoil it for electrical purposes.

INDEX OF INVENTIONS

For which Letters Patent of the United States were Issued for the Week Ending September 24, 1901, AND EACH BEARING THAT DATE.

[See note at end of list about copies of these patents.]

Table listing inventions with patent numbers and dates. Includes items like Adjustable screen, Alarm, Alimentary extract, Armature core, Auger post, Bank, coin savings, Bank draft, Barber chair, Bayonet, Bearing, Bed bottom, Bed bottom and upholstery support, Bed netting support, Bed pan, Bed spring, Bedstead corner fastening, Bicycle, Binder, Binder, temporary, Boat, life, Boat, submarine, Boiler cleaning compound, Boiler pipes, tubing, etc., Boring instrument for building or mining purposes, Box lid holder, Brick, self-centering building, Bridge gate, Broom bridle, Brush polishing attachment, shoe, Bung hole stopper or seal for metallic kegs, Buoy, night light, Burglar alarm, Butter cake forming and printing machine, Caisson, Cane elevator or loader, portable sugar, Car checking device, Car control system, electric, Car control system, electric, C. Hoehnegg.

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